

REMARKS

Claim 105 has been amended. New claims 118-130 have been added. Upon entry of this amendment claims 95-130 are pending. Support for the new claims can be found throughout the specification.

New independent claim 118 recites similar language as claim 18 of US Patent No. 6,320,100 (application Serial No. 09/547,422) but without the process steps and without reference to the three-letter amino acid code.

Reference to the three-letter amino acid code has been eliminated for clarity in amended claim 105 and new claim 118. Since each codon encodes for only one of the 20 amino acids used in the synthesis of proteins there is no need to maintain the reference to the three-letter amino acid code in the claims. The codons recited in the two claims will each code unambiguously for only one amino acid, such that GCG codes for Ala, CGC codes for Arg, AAC codes for Asn, GAC codes for Asp, TGC codes for Cys, CAG codes for Gln, GAG codes for Glu, GGC codes for Gly, CAC codes for His, ATC codes for Ile, CTG codes for Leu, AAG codes for Lys, ATG codes for Met, TTC codes for Phe, CCC codes for Pro, AGC codes for Ser, ACC codes for Thr, TGG codes for Trp, TAC codes for Tyr, and GTG codes for Val. Thus, the amino acid coded for is inherent in each codon.

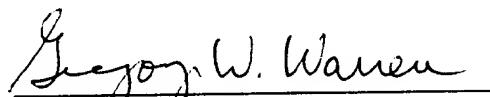
Attached hereto is a marked up version of the changes made to claim 105 by the current amendment. The attached page is captioned "**Version With Markings To Show Changes Made**".

A Credit Card Payment Form is enclosed for payment of the \$234 fee under 37 CFR §1.16(e) for the additional claims added by way of this amendment. Applicants believe no further

fees are required with this submission. However, if further fees are deemed necessary the Commissioner is hereby authorized to charge any fees under 37 CFR 1.16 to Applicant's Deposit Account No. 50-1744 in the name of Syngenta.

No new matter has been added by way of this amendment. Examination and favorable consideration of the application as amended is respectfully requested.

Respectfully submitted,



Gregory W. Warren
Gregory W. Warren
Agent for Applicants
Reg. No. 48,385

Syngenta Biotechnology, Inc.
P.O. Box 12257
Research Triangle Park, NC 27709-2257
(919) 541-8646
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In re Application of
Koziel *et al.*
Serial No. 09/988,462

Version With Markings to Show Changes Made

105. (Amended) A transgenic plant seed comprising a chimeric gene comprising a heterologous promoter sequence operatively linked to a synthetic DNA coding sequence that encodes a *Bacillus thuringiensis* (Bt) insecticidal protein selected for optimized expression in a plant, wherein said synthetic DNA coding sequence is produced by a method comprising:

- (a) obtaining the amino acid sequence of said Bt insecticidal protein;
- (b) reverse-translating said amino acid sequence into a synthetic DNA coding sequence comprising a sufficient number of the following codons: [Ala.] GCC[; Arg], CGC[; Asn], AAC[; Asp], GAC[; Cys], TGC[; Gln], CAG[; Glu], GAG[; Gly], GGC[; His], CAC[; Ile], ATC[; Leu], CTG[; Lys], AAG[; Met], ATG[; Phe], TTC[; Pro], CCC[; Ser], AGC[; Thr], ACC[; Trp], TGG[; Tyr], TAC[;], and [Val.] GTG; such that said synthetic DNA coding sequence has at least about 60% G+C content; and
- (c) synthesizing said DNA coding sequence.